

WHAT IS CLAIMED IS:

1. An optical assembly comprising at least a light emitter, a pattern of individual deformities of well defined shape that are projections or depressions on or in at least one side of the light emitter for controlling an output ray angle distribution of light emitted from at least one surface area of the light emitter to suit a particular application, the deformities being quite small in relation to a width and length of the light emitter, at least some of the deformities having two or more surfaces that come together to form a ridge having a total length that is quite small in relation to the width and length of the light emitter, the ridge of at least some of the deformities having ends that intersect the light emitter or other deformities where the ridge ends, and additional deformities that are projections or depressions on or in an opposite side of the light emitter.

2. The assembly of claim 1 wherein the additional deformities on or in the opposite side of the light emitter are prismatic or lenticular.

3. The assembly of claim 1 wherein the additional deformities on or in the opposite side of the light emitter are quite small in relation to a width and length of the light emitter.

4. The assembly of claim 1 wherein only the deformities on or in the one side of the light emitter have ridges.

5. The assembly of claim 1 wherein at least some of the additional deformities on or in the opposite side of the light emitter have ridges.

6. The assembly of claim 5 wherein the ridges of at least some of the deformities on different sides of the light emitter are in different directions.

7. The assembly of claim 1 wherein the ridges of substantially all of the deformities on or in the one side of the light emitter are in the same direction.

8. The assembly of claim 1 wherein at least some of the deformities on or in the one side of the light emitter overlap, interlock or intersect other deformities.

9. The assembly of claim 1 wherein the deformities on or in the one side of the light emitter have a shape or pattern that reduces moiré or other interference effects in association with a display.

10. The assembly of claim 1 wherein the deformities on or in the one side of the light emitter are random to reduce moiré or other interference effects in association with a display.

11. The assembly of claim 1 wherein at least some of the deformities on or in the one side of the light emitter have angles that vary to

direct light in different directions to produce a desired light output distribution or effect.

12. An optical assembly comprising at least a light emitter, a pattern of individual deformities of well defined shape that are projections or depressions on or in at least one side of the light emitter for controlling an output ray angle distribution of light emitted from at least one surface area of the light emitter to suit a particular application, the deformities being quite small in relation to a width and length of the light emitter, and additional deformities of well defined shape that are projections or depressions on or in an opposite side of the light emitter.

13. The assembly of claim 12 wherein the additional deformities on or in the opposite side of the light emitter are prismatic or lenticular.

14. The assembly of claim 12 wherein the additional deformities on or in the opposite side of the light emitter are quite small in relation to a width and length of the light emitter.

15. The assembly of claim 12 wherein at least some of the deformities on or in the one side of the light emitter overlap, interlock or intersect other deformities.

16. The assembly of claim 12 wherein the deformities on or in the one side of the light emitter have a shape or pattern that reduces moiré or other interference effects in association with a display.

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17. The assembly of claim 12 wherein the deformities on or in the one side of the light emitter are random to reduce moiré or other interference effects in association with a display.

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18. The assembly of claim 12 wherein at least some of the deformities on or in the one side of said light emitter have angles that vary to direct light in different directions to produce a desired light output distribution or effect.